

**Tina DiCarlo speaks with Tomas Saraceno about Why He Loves Blowing Bubbles, Weaving Webs, and Living with His Head in the Clouds**

Tina Di Carlo: Why do you like bubbles?

Tomas Saraceno: (Smile) You know I like sparkling water.

TDC: Yes me too. Effervescent. My favourite.

TS: Do you know Barthes?

TDC: Roland Barthes?

TS: On spiders No Friedrich Barths, *A Spider's World: Senses and Behaviour*. The spider who spins a web and leaves a bubble at the same time. Do you know it's a spider's world?

TDC: I don't.

TS: Do you know what does Borges says?

TDC: Do you like Borges? What does he say?

TS: I have an ambivalent relationship with him. He had a series of stories that he would tell. Do you know that he became progressively blind, that somehow it seems this blindness enabled the fictional materialism, that tales, labyrinths, fictions he would create and weave.

TDC: What do you prefer webs or bubbles? Tangles or transparency?

TS: Do you know that there is a spider that has a bubble-spinning web? Or there is a spider that can travel from Africa to Europe along his web. This is quite different from us or from birds. You know birds have their wings to fly. And we have our legs to walk.

TDC: (Looking at the top image of the boxed catalogue from the 53rd Venice Art Biennale "Making Worlds") Is this a spider here? Without a web?

TS: Yes. Do you know there are some spiders that are meant to be alone, and others that are meant to be in a collective. There are only a few that spin their webs, together.

TDC: You mean they are not like ants, that live in a colony.

TS: Exactly.

And see this here, this is Thomas and Helke Bayrle, a spider web in his house that he let sit for years: "... Helke found an image of the spider-network of an old HI8 from 1994 – It grew in our living room—for 15 years – and it was an enormous spider

cooperation (about 1:50 x 1:50 cm) – till – one day it completely fell down ... \t hat's life ...”

TDC: It's totally black? Did this supposedly influence you? Or have a similarity with your work?

Supposedly. But not really. I just put it there.

TDC: So what is it about bubbles? Or balloons?

TS: Do you know in balloons you can't feel the wind. No truly. You know I have done it all – windsurf, parasailing, kiting sailing, kite surfing, paragliding, parachuting, sailing – and in all of them you feel the wind. Because there is friction. So if you are in a sailboat there is the friction on the water, and the sail that is supposed to catch the wind, and creates pull. But in a balloon you literally don't feel the wind, because you are moving with the wind. So if you put out your hand you don't feel the wind. You have to do it really.

TDC: What did you think of Geoffrey West today, you know the physicist who says the bigger cities are, the more sustainable they are. And the more efficient.

TS: No I agree with his theory that we must densify, but I like to think that then I like to think that floating above these dense megalopolises there can be something else – cloud city.

TDC: So what is it with bubbles? Did you blow bubbles when you were little?

TS: *(More smiles)*

TDC: Why did you mention Bucky Fuller today?

TS: Someone had to mention him. I thought it was odd that he was left out.

TDC: He is one of your heroes, why?

TS: He makes biospheres.

TDC: A biosphere meaning a self-sufficient or closed self-regulating system or the global sum of all ecosystems? It reminds me of a quote from your exhibition at the Walker: “Saraceno is treating the gallery space as a biosphere, where works installed in close proximity sometimes connect through a network of cords and ropes to offer a concrete picture of what the world would look like if he was to design it.”

TS: I have other heroes too. You know the guy who does the mirrors, Dan Graham. I think he is smart, super smart. He talks about a psychology of science.

TDC: So what about Argentina? You are from Argentina correct?

TS: You know I think this idea of a nationality is a myth or totally ridiculous. You ask me where I was born and I say Argentina but it doesn't mean anything. I was ten

years in Argentina, ten years in Italy, ten years again in Argentina, and now ten years in Germany.

TDC: So does it make you feel like you aren't from anywhere? You have bits of you that are each. The danger is that you drift, never feel settled. Bourriaud talks about this new generation of artists as radicants. It is nomadic.

TS: It is more than that. Most people travel a lot but they haven't actually lived in different places. It is different.

TDC: Like a series of enrooting or entanglements that suddenly and sometimes reluctantly you must rip up, like roots? I keep thinking about tillandsia – the rootless plant that gains all its sustenance through its leaves and air – that you incorporated into your Airport City.

So how would you characterise your relationship with Buenos Aires?

TS: You know, I am done with big cities. Buenos Aires is a slow city, it is huge.

TDC: Like London?

TS: No bigger because it doesn't move. At least in London you can take the tube and you have the sense of speed. But there are no tubes or undergrounds in Buenos Aires. There is only the bus. And if you can't afford to take the taxi, then you take the bus. When I was there I would take the bus for an hour across town to school, and an hour back. And so you do this for seven years and then you are done.

TDC: Tell me about your forthcoming exhibitions at the Mildred Lane Kemper Art Museum, the Hamburger Bahnhof and "14 Billion," that began in Stockholm?

TS: 2011 will be my year or not.

TDC: What is in 2011?

TS: In this year I will have an installation on the roof of the Metropolitan Museum, and installation at the Hamburger Bahnhof in Berlin, and an installation at K12. And I don't even have a book yet – well they will do a book, Hans Ulrich, Daniel Birnbaum

I thought for the panel, Hans brought together interesting people. You know it is this law of transcendence or a transcendental law, to bring people from different disciplines together. And Hans does this beautifully. When they were trying to rate these systems, you would get more points for ...

TDC: Daniel Birnbaum's title to the 2008 Biennale was called "Making Worlds." And one of your earlier works shown in the Sao Paulo Biennale is called "How to Live Together." So the first questions that come to mind are: What sort of worlds do you make or how does your work propose that we live together?

TS: Here I give you something. This was made for the 2009 Venice Biennale.

TDC: A spider without a web, or who spins a web inside?

TS: Where is everybody

They Are Here  
They Were Here and Left Evidence of Their Presence  
They Exist and They are us – We Are all Aliens  
The Zoo Scenario  
The Planetarium Hypotesis

They Exist But Have Not Yet Communicated  
The Stars are Far Away  
They Have Not Had Time to Reach Us  
Bracewell-on Neumann Probes  
We Are Solar Chauvinist  
They Stay at Home  
... and Surf the Net  
They Are Signalling But We Do Not Know How to Listen  
They Are Signalling But We Do Not Know at Which Frequency to Listen  
Our Search Strategy Is Wrong  
The Signal Is Already There in the Data  
We Have Not Listened Long Enough  
Everyone is Listening, No One Is Transmitting  
Berserker  
They Have No Desire to Communicate  
They Develop a Different Mathematics  
They Are Calling But We Do Not Recognize the Signal  
They are Somewhere But the Universe Is Stranger Than We Imagine  
A Choice of Catastrophes  
They Hit the Singularity  
Cloudy Skies Are Common  
Infinitely Many ETC's Exist But Only within Our Particle Horizon: Us.

TDC: Would you call yourself a futurist?

TS: They Do Not Exist

The Universe is Here for Us  
Life Can Have Emerged Only Recently  
Planetary Systems Are Rare  
We Are the First  
Rocky Planets Are Rare  
Continuously Habitable Zones Are Narrow  
Jupiters Are Rare  
Earth Has an Optimal “Pump of Evolution”  
The Galaxy Is a Dangerous Place  
A Planetary System Is a Dangerous Place  
Earth's System of Plate Tectonics Is Unique  
The Moon Is Unique  
Life's Genesis Is Rare

The Prokaryote Eukaryote Transition is Rare  
Toolmaking Species Are Rare  
Technological Progress Is not Inevitable

Abstract from the chapters of the book “Where is everybody” by Stephen Woods.

TDC: Can you speak about the physicist Fritjof Capra? I stumbled upon this quote: “Throughout the living world, we find systems nesting within other systems. And living systems also include communities of organisms. These may be social systems—a family, a school, a village—or ecosystems.”

TS: Here. Look. Living Networks: “Biological systems exchange molecules networks of chemical reactions,; social systems exchange information and ideas in networks of communication. Thus, biological networks operate in the realm of matter, whereas social networks operate in the realm of meaning.”

TDC: Let return to where you started tonight. \*\*Would you tell us more about the installation the features Salar de Uyuni? What is a “plane existence suspended among the clouds”?

TS: Bolivia. It is the flattest surface on the planet earth. They use it to calibrate satellites. I went there fascinated about the ideas of clouds. I went there trying to make a movie, during the night when the moon was not really out. We came out to pee, I must say. All the stars are reflected also. Here horizon got blurred, the GPS worked, but compass does not work because it is the biggest reserve of lithium.

TDC: Is this like having your head in the clouds and your feet on the ground at the same time? Or wouldn't you rather have your head in the clouds.

TS: My project is about imagining a cloud city. If one imagines that it missing it is Buckminster Fuller. How could we imagine cloud city? I make a classification of how the future of architecture could be built. I look at a typology of clouds.

TDC: How does your work think the limits of sustainability?

TS: The solar planet is one great thing.

TDC: It has been written that your work “transcends quixotic ambition by applying practical principles from engineering, physics, chemistry, aeronautics, and architecture to experiment and model logistical solutions for airborne habitation.” How, for example, does your dodecahedron – which according to recent scientific theory may characterize the universe -- compare with Fuller's geodesism or his geodesic domes?

TS: Soap bubble technology can connect in great relations between volume and surface.

TDC: Would you tell us more about your mile-long geodesic balloon? Does it foreground ecological sustainability because does not rely on impositions upon or obliterations of the natural landscape to exist? Could this be considered a

megastructure? I am again thinking of the visionary work of the late 1960s, Superstudio or even Haus Rucker ...

TS: We need Wider World Web. HAP. High Altitude Platform. I was missing this comment today. Two thirds of population do not have access to internet. Just to locate the cloud to a different height might be able to deal with this. Also as a kind of interface, how you would communicate with a cloud. Then there are ideas of how you could collect sun, solar panels in the middle. How you connect things, we are cooking a chicken here. Or how to re-think nature as we did in the exhibition in Copenhagen. I love biospheres, Bucky was saying ... as experience inside. What happens here volume is high it became a floor which was completely unstable, if you move, all of you will change movement, this butterfly effect has always fascinated me. Hands on we begin to build solar balloon, can build for 300 euros and can fly by solar energy. Can build it in a week ... Move with the wind. I love balloons more than airplanes, you have to understand much more hand the weather works. Connect plastic bags do a huge balloon flies with solar energy ...

TDC: In his 1970 book *I Seem To Be a Verb* Fuller writes: "I live on Earth at present, and I don't know what I am. I know that I am not a category. I am not a thing — a noun. I seem to be a verb, an evolutionary process — an integral function of the universe." Could one say that the verb "to float" -- from its associations of buoyancy and suspension to any economic metaphors to those of surface, drift, and lightness -- might provide a terminological point of departure for your work?

TS: Astrophysicists use the image of a spider web to describe the formation and structure of the universe; they state that a similar type of geometry exists between both phenomena.

TDC: So a web is as utopic or visionary as a bubble?

TS: You know that some wolf spiders living at the edge of ponds run away over the water, they return to firm ground by using visible landmarks or, if these are absent, astronomical cues such as the ... patterns of the sky corrected by an internal clock. That is my friend Barths.

TDC: Roland Barthes?

TS: Yes.

Postscript:

I met Tomas Saraceno for the first time at Munich's annual Digital Life Design Conference in January. He had just participated in a panel called EVER CLOUDS, moderated by Hans Ulrich Obrist, which proposed via the words of German author and poet Hans Magnus Enzensberger that "we cannot talk about science and technology unless we talk about poetry."

Here Saraceno counted among other visionaries of our time who take on the poetry of space, including: French philosopher in aesthetics and art history, Hubert Damisch

who, in his 1972 *Theory of Clouds*, describes the cloud as the moment at which the system escapes; Enzensberger who spoke of cloud archaeology as a science for angels; engineer Matthias Schuler of Transsolar who, along with architect Tesuo Kondo, created Cloudscapes for the Corderie in the recent Venice Architectural Biennale because he wanted “make people aware that climate change is happening but move them by beauty;” architect Elizabeth Diller of Diller Scofidio + Renfro, whose recent project that inserts a balloon into the rotunda of the Hirschorn Museum in Washington, DC, only to see it bubble up and ooze outside, continues her “commitment to making formless architecture and an architecture of atmosphere;” architect Andreas Angelidakis whose cloud house and vocabulary of a life with objects recalls those of Haus Rucker and Ettore Sottsass; and Werner Vogels, Vice President of Amazon, who speaks of cloud technology in a digital age.

Saraceno’s work floats. His worlds hover yet are tethered, harking back to technological visionaries of the 1960s and 1970s -- Buckminster Fuller, Peter Cook, Frei Otto, and Yona Friedman, among others – while modeling possible utopias. His worlds are paradoxical, ambivalent, suspended, material biospheres that in their nomadism, transparency and tangles, eschew borders, reference climate change and energy, even contagion, to abstractly take on the space of the expanded spatial environment that plagues us as the most pressing political issue of our day. These works propose new social organisation while redefining the architects relationship to the gallery, in which the exhibition is invoked as a site of proposal for future worlds and redefine our behaviours in this one.

Such a slippage between earth and sky, temporal horizons, materiality and abstraction – what could be termed a historical presence of the future where we are suspended on the ground – becomes apparent in Saraceno’s first image: a photograph of Salar de Uyuni in Bolivia, the worlds largest salt flat or as he describes it a “plane existence suspended among the clouds.” Such ethereal photos seems perhaps worlds apart from Saraceno’s tangles in “Drops on the Spider Web – Developed Along the Filaments,” for the 53<sup>rd</sup> Venice Art Biennale. And yet it is the spider’s web that approximates our early universe, a series of threads and clumps, dappled perhaps with water, and setting the stage for future growth.

Born in Argentina of an Italian family, having lived in Buenos Aires, Italy and schooled at Frankfurt’s Staedelschule, Saraceno’s life is perhaps as nomadic as his work. Our conversation was equally as fleeting. It began at 3 a.m. when time itself seemed as if suspended. There was no recorder. Nor note taking. As Saraceno himself would say only six hours earlier in relation to Airport City-Cloud City: “I will give you 50%; the other 50% you have to imagine yourself.” What reads above is thus a 50% perhaps more true in its fiction, because in meeting Saraceno one understand that his work cannot be bound to words. To speak of it directly would be both futile and beside the point.